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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,337	01/03/2002	Ning Mo	2705-201	7298

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EXAMINER

ADHAMI, MOHAMMAD SAJID

ART UNIT PAPER NUMBER

2662

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/038,337	<b>Applicant(s)</b> MO ET AL.	
	<b>Examiner</b> Mohammad S. Adhami	<b>Art Unit</b> 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,4,7, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (US App 2001/0048662).

Re claims 1,4,7, and 10:

Suzuki discloses “a network interface for coupling to a network” (Figure 1 reference 2 where the routing unit couples to a network), a processor adapted to “receive voice data packets through a packet switched network” (Paragraph [0020] “receiving packet data”), “store the received packets in a buffer” (Figure 2 reference 32 where the register is a buffer for storing packets), “play out some of the stored packets from the buffer” (Figure 2 reference 33 shows a transmitter and Paragraph [0009] “transmitting audiovisual data consisting of a plurality of streams”), “extract a comparative discardability code of a specific one of the stored packets relative to the others” (Paragraph [0084] “The selective transmission controller...analyzes the DS value in the IP header” where the DS value is a “comparative discardability code” as described in Paragraph [0014]

"[identifier]...data for initiating or terminating the discard of packet data, to a DS (differentiated Services) field value attached to the headers in the IP packet data"), "make a discard decision for the specific packet in accordance with the extracted comparative discardability code; and delete the specific packet without playing it out if the discard decision is to drop the packet" (Paragraph [0020] "performing discard initiation or termination based on the control code data" where once a decision is made to terminate, the packet is deleted).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,5,8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Bharucha (US App No. 2003/0081610).

Suzuki discloses extracting the "comparative discardability code...responsive to the determination [to diminish a size of the buffer]" (Paragraph [0024] "if the buffer amount increases to reach or exceed the discard initiation/termination point, and data including predetermined control code data and flow identifier data is received, then the discard of packet data including that flow identifier is initiated").

Suzuki does not explicitly disclose a single buffer that “[determines] to diminish the size of the buffer” and extracts “the comparative discardability code” of a specific packet stored in that same buffer, responsive to the determination.

Bharucha discloses a single buffer that “[determines] to diminish the size of the buffer” and extracts “the comparative discardability code” of a specific packet stored in that same buffer, responsive to the determination (Paragraph [0035] “Where the cells are marked, a queue overflow in output buffer... may be addressed by discarding marked cells in the case of an impending buffer overflow” where “packets” are removed in response to feedback from the buffer about the size, or overflow).

Suzuki and Bharucha are analogous because they both pertain to network communications using packet-switched networks.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Suzuki by utilizing a single buffer that provides feedback on the buffer size and deletes specific stored packets from the buffer as taught by Bharucha in order to simplify the buffer/memory configuration of the system.

5. Claims 3,6,9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Cloonan (US 6,898,182).

As discussed above, Suzuki meets all the limitations of the parent claim.

Suzuki does not explicitly disclose “a discarding probability in accordance with the analyzed comparative discardability code” and “the discard decision [being] made in accordance with the set discarding probability.”

Cloonan discloses "a discarding probability in accordance with the analyzed comparative discardability code" and "the discard decision [being] made in accordance with the set discarding probability" (Abstract "The probability that the current packet is either dropped or used is determined by using the current data packet service flow rate, the data packet priority, and the current buffer circuit depth" where the packet priority is a "comparative discardability code").

Suzuki and Cloonan are analogous because they both pertain to deleting packets based on buffer size.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Suzuki as discussed above as taught by Cloonan in order to provide a "fair manner of controlling the flow of packets in a data communication system" (Cloonan Col. 3 lines 1-2).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ott (US 6,560,198) and Ben Nun (US 6,950,393) both show dropping packets based on buffer size. Sundqvist (US App. No. 2004/0076191) shows deleting packets from a buffer based on a parameter.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad S. Adhami whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSA 10/18/2005



JOHN PEZZLO  
PRIMARY EXAMINER